

EPA's Hazardous Air Pollutant Program in Contrast to NR 445

NR 445 Technical Advisory Group
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Presentation Overview

- Program elements - history and future
- MACTs
 - Applicability, basis, content
 - Progress & schedule
 - Typical proposal/compliance timeline
 - Contrast to NR 445

Timeline - History

- 1963 Clean Air Act
- 1970 Amendments include NESHAPs
 - 40 CFR 61 & NR 446-9
- 1988 NR 445
- 1990 Amendments include MACT, etc.
 - 40 CFR 63 & NR 460-9

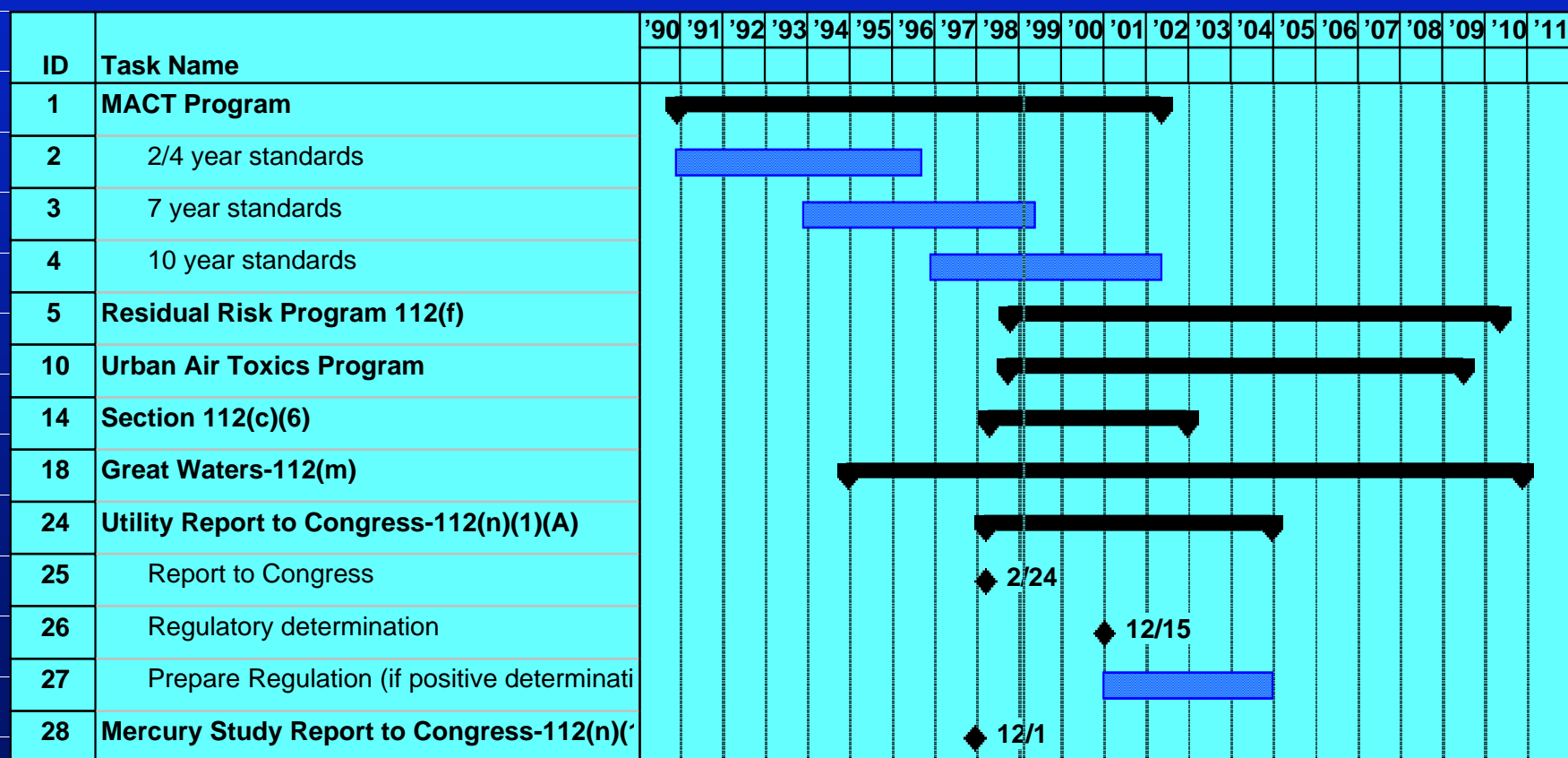
MACT Schedule

- 2 yr - 40 categories plus coke ovens
- 4 yr - complete 25% (43 categories)
- 7 yr - complete 50% (87 categories)
- 10 yr - complete all (174 categories)

EPA's Air Toxics Program

- Source-specific standards and sector-based standards
 - MACT (Sections 112 and 129)
 - Residual Risk
 - Utilities study
- National, regional, community-based initiatives to focus on multi-media and cumulative risks
 - Integrated Urban Air Toxics strategy
 - PBT and TMDL initiatives
 - Great Waters
 - Clean Air Partnerships
 - Mercury initiatives
- National air toxics assessments (NATA)
 - Emission Inventories
 - Air quality, exposure, and risk modeling
 - Monitoring network
 - Ongoing research on effects and assessment tools
- Educational outreach

Timeline for EPA's Programs



Maximum Achievable Control Technology (MACT)

- Applies to listed industrial source categories
- Technology based standard (best 12%)
- Includes: limitation, initial performance demonstration, monitoring, record keeping & reporting

The 2-year Bin

- **Promulgated 2 standards covering 6 source categories:**
 - **Dry Cleaning (5 categories)**
 - **Hazardous Organic NESHAP (HON)**

The 4-year Bin

- **Promulgated 19 standards covering 40 source categories:**

Aerospace	Magnetic Tape	Polymers & Resins IV*
Asbestos (delisted)	Marine Vessels	Secondary Lead
Chrome Electroplating*	Print & Publishing	Shipbuilding
Coke Ovens	Off-site Waste	Gas Distribution
Commercial Sterilizers*	Petroleum Refineries	Wood Furniture
Halogenated Solvents*	Polymers & Resins I*	
Haz Waste Combustors	Polymers & Resins II*	
Industrial Cooling Towers		

*** = covers more than one source category**

The 7-year Bin

- Promulgated 21 standards (covering 31 source categories)

Primary Aluminum	Polyether Polyols	Portland Cement
Pulp & Paper MACT I	Steel Pickling	Generic MACT:
Pulp & Paper MACT II	Wool Fiberglass	Acrylic/Modacrylic
Tetrahydrobenzaldehyde	Mineral Wool	Hydrogen Fluoride
Pharmaceuticals	Ferroalloys	Polycarbonates
Phosphoric Acid	Primary Lead	Acetal Resins
Phosphate Fertilizer	Oil & Natural Gas	
Flex. Polyurethane Foam	Pesticide Active Ingredient*	

* = covers more than one source category

The 7-year Bin (*continued*)

Proposed 4 rules (covering 5 source categories)

- Publicly Owned Treatment Works - October 1999
- Polymers & Resins III - December 1999
- Secondary Aluminum - December 1999
- Pulp & Paper (combustion) MACT II - Dec 2000

■ Delisted 5 source categories

- Chromium Chemicals
- Nylon 6
- Wood Treatment
- Stainless Steel and Non-Stainless Steel

The 10-year Bin

- There are 62 10-year MACT standards
 - covering 94 source categories
- Standards are currently under development
- Statutory deadline is November 15, 2000
- 112j "hammer" date is May 15, 2002

Selected Upcoming MACTs

WET FORMED FIBERGLASS MAT
CELLULOSE MANUFACTURING
BOAT MANUFACTURING
ETHYLENE PROCESSES
METAL COIL
MUNICIPAL SOLID WASTE
LANDFILLS
LEATHER TANNING & FINISHING
POLYVINYL CHLORIDE &
COPOLYMERS
PAPER & OTHER WEBS
REINFORCED PLASTIC
COMPOSITES
INTEGRATED IRON & STEEL
MANUFACTURING
RUBBER TIRE MANUFACTURING

MISC. ORGANIC NESHAP (MON)
CHLORINE PRODUCTION
LARGE APPLIANCE
METAL CAN
METAL FURNITURE
IRON & STEEL FOUNDRIES
COMBUSTION TURBINES
ORGANIC LIQUIDS DISTRIBUTION
RECIP. INT. COMBUSTION ENGINES
PLYWOOD & COMPOSITE WOOD
PRODUCTS
INDUSTRIAL BOILERS
COMMERCIAL/INSTITUTIONAL
BOILERS

Typical Timeline for a MACT

- Proposed MACT (“new source” date)
- Final MACT (1 yr after proposal)
- Initial Notification (120 days after final)
- Compliance Date (3 years after final)
- Performance test (within 180 days)
- Test Report and Compliance Certification (60 days after test)

S. 129 Combustion Standards

- **Municipal Waste Combustion (final 12/95)**
 - received a court remand in 1997
 - re-proposed NSPS/EG August 1999
 - promulgate NSPS/EG by November 2000

- **Hospital/Medical/ Infectious Waste Incineration**
 - promulgate NSPS/EG 9/97
 - Federal Implementation Plan... soon

- **Industrial/Commercial Waste Incinerators**
 - proposed NSPS/EG November 1999
 - promulgate NSPS/EG by November 2000

MACT & NR 445

- Only one element of federal program
- By source category
- Covers 188 HAPs
- Technology based std
- Only specific units
- Specific control method options
- Possible to take limits to avoid MACT
- Comprehensive for stationary sources
- By pollutant
- Covers 400+ HAPs
- Health based standard
- Facility-wide
- Performance requirement
- Possible to take limits to meet standards